

ABSTRACT

[1093] Techniques for providing secure processing and data storage for a wireless communication device. In one specific design, a remote terminal includes a data processing unit, a main processor, and a secure unit. The data processing unit processes data for a communication over a wireless link. The main processor provides control for the remote terminal. The secure unit includes a secure processor that performs the secure processing for the remote terminal (e.g., using public-key cryptography) and a memory that provides secure storage of data (e.g., electronics funds, personal data, certificates, and so on). The secure processor may include an embedded ROM that stores program instructions and parameters used for the secure processing. For enhanced security, the secure processor and memory may be implemented within a single integrated circuit. Messaging and data may be exchanged with the secure unit via a single entry point provided by a bus.